AMENDMENTS TO THE SPECIFICATION:

Page 1, please amend the title as follows:

--WIRELESS LAN SYSTEM WITH CELL SWITCHING PROTOCOL AND METHOD FOR THE SAME--

Page 1, replace the paragraph, beginning on line 4, with the following amended paragraph:

--The present invention relates to a wireless LAN system and a method for the same, wherein a mobile terminal ~~connects~~ is wirelessly connected to a network so that communications are conducted. Particularly, the present invention relates to a wireless LAN system and a method for the same, wherein communications can be seamlessly maintained while a mobile terminal is moving between the wireless cells of respective base stations connected to a network.--

Page 1, replace the paragraph, beginning on line 13, with the following amended paragraph:

--In the wireless LAN system that allows a mobile terminal to be connected wirelessly to a communication network while the mobile terminal is freely moving, an agent on the communications network ~~manages~~ tracks the location of a mobile terminal. To ~~manage~~ track the location of a mobile terminal, an agent has to register the location of the mobile terminal.--

Page 1, replace the paragraph, beginning on line 20, with the following amended paragraph:

--There are two methods to ~~catalog~~ register locations [[on]] in an agent. ~~That is,~~ In one ~~is the~~ method ~~in which~~ a mobile terminal receives the frame of an agent advertisement periodically sent from an agent to ~~catalog~~ register the location thereof. ~~The~~ In the other ~~is the~~ method ~~in which~~ a mobile terminal itself detects an agent to ~~catalog~~ register the location thereof.

Page 2, replace the paragraph, beginning on line 1, with the following amended paragraph:

--Generally, in comparison with the latter, the former can [[more]] shorten the time period until a mobile terminal establishes communications with the network.--

Page 2, replace the paragraph, beginning on line 4, with the following amended paragraph:

--Fig. 4 is a block diagram illustrating the configuration of a wireless LAN system ~~applied when~~ in which an agent periodically sends an agent advertisement. Referring to Fig. 4, the wireless LAN system includes a router R_1, networks NW_1 and NW_2, base stations BS_1 to BS_4, agents [[AD_1]] $\underline{AG_1}$ and AG_2, and mobile terminals MT_1 to MT_4. Each of the networks NW_1 and NW_2 is, for example, Ethernet. The router R_1 connects the network NW_1 and the network NW_2.--

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Page 2, replace the paragraph, beginning on line 12, with the following amended paragraph:

--The ~~networks~~ base stations BS_1 and BS_2 are in the network NW_1. The ~~networks~~ base stations BS_3 and BS_4 are in the network NW_2. The radio cells C_1 to C_4 belong to the base terminals BS_1 to BS_4, respectively. When the mobile terminal MT_1, MT_2, MT_3, or MT_4 is within any one of the radio cells C_1 to C_4, respectively belonging to the base stations BS_1 to BS_4, it is connected to the base station in the corresponding radio cell. Thus the corresponding mobile terminal conducts IP (Internet Protocol) communications via the corresponding base station. As shown in Fig. 4, when ~~being~~ within the radio area C_1 of the base station BS_1, the mobile terminal MT_1 is linked to the base station BS_1, thus conducting communications via the base station BS_1.--

Page 2, replace the paragraph, beginning on line 25, bridging pages 2 and 3, with the following amended paragraph:

--The agent AG_1 belongs to the network NW_1 while the agent AG_2 belongs to the network NW_2. In order to perform the IP mobility support or location ~~management~~ tracking of a mobile terminal connected to the base station BS_1, BS_2 in the corresponding network, the agent AG_1 periodically sends an agent advertisement frame to all the base stations BS_1 and BS_2 connected to the network NW_1. In order to perform the IP mobility support or location ~~management~~ tracking of a mobile terminal connected to the base station BS_3, BS_4 in the corresponding

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network, the agent AG_2 periodically sends an agent advertisement frame to all the base stations BS_3 and BS_4 connected to the network NW_2. Each of the base stations BS_1, BS_2, BS_3, and BS_4 sends an agent advertisement frame within its radio area.--

Page 3, replace the paragraph, beginning on line 14, bridging pages 3 and 4, with the following amended paragraph:

--When moving from the radio area C_1 of the base station BS_1 to the radio area C_3 of the base station BS_3, the mobile terminal MT_1 detects its movement because communications to the base station BS_1 are interrupted. Subsequently, the mobile terminal MT_1 newly performs a belonging sequence process to the base station BS_3 and then waits for an agent advertisement issued from the base station BS_3. When receiving the agent advertisement, the mobile terminal MT_1 changes the setting of the internal network and notifies the agent [[AG_1]] $\underline{AG_2}$ of the movement. When receiving the notice of the movement, the agent [[AG_1]] $\underline{AG_2}$ registers the mobile terminal MT_1 to ~~manage~~ $\underline{track}$ the location of the mobile terminal MT_1.--

Page 5, replace the paragraph, beginning on line 6, with the following amended paragraph:

--An ~~abject~~ $\underline{object}$ of the present invention is to provide a wireless LAN system and a wireless LAN system control method, that can shorten the time period during which a base station is switched to another base station.--

Page 5, replace the paragraph, beginning on line 10, bridging pages 5 and 6, with the following amended paragraph:

--In order to solve the above-mentioned problem, a wireless LAN system of the invention comprises a plurality of communications networks connected to each other; wireless base stations for periodically transmitting a signal within a wireless cell, at least one of the wireless base stations being disposed in each of the networks; a mobile terminal for transmitting, when newly receiving the signal, a belonging request to a wireless base station which has transmitted the signal and connecting, when receiving permission for belonging from the wireless base station, the mobile terminal to the wireless base station, thus conducing communications; and agents each for distributing an agent advertisement onto the communications networks and ~~managing~~ tracking, after the mobile terminal receives the agent information, the location of the mobile terminal based on movement information transmitted from the mobile terminal, each of agents being disposed in [[each]] a respective one of the communications networks. Each of the base stations stores the agent information based on the agent advertisement distributed onto the communications network, receives a belonging request from the mobile terminal, and transmits, when belonging of the mobile terminal is permitted, the agent information to the mobile terminal to be stored, together with the permission for belonging.--

Page 8, replace the paragraph, beginning on line 14, with the following amended paragraph:

--As shown in Fig. 1, when the mobile terminal MT_1 moves from the radio area [[C_1']] $\underline{C_1}$ of the base station BS_1' to the radio area [[C_3']] $\underline{C_3}$ of the base station BS_3', the mobile terminal [[MT_1']] $\underline{MT_1}$ newly transmits a belonging request to the base station BS_3'. Meanwhile, the mobile terminal [[MT_1']] $\underline{MT_1}$ waits for reception of an agent advertisement frame. Because an agent advertisement transmitted from the agent has been already stored, the base station BS_3' transmits the agent advertisement to the mobile terminal MT_1.--

Page 9, replace the paragraph, beginning on line 3, with the following amended paragraph:

--As described above, in the wireless LAN system of the present embodiment, each of the base stations BS_1' to BS_4' stores agent advertisements transmitted from the agents AG_1 and AG_2. Thus, when the mobile terminal MT_1, [[M_2]] $\underline{MT_2}$, [[M_3]] $\underline{MT_3}$, MT_4 tries to establish connection, the base station can immediately transmit the agent advertisement. For that reason, in the wireless LAN system, it is not required that the mobile terminal MT_1, MT_2, MT_3, MT_4 waits until the agent AG_1, AG_2 transmits an agent advertisement. As a result, the time period required to catalog the mobile terminal MT_1, MT_2, MT_3, MT_4 in the agent AG_1, AG_2 can be shortened. The wireless LAN system can shorten the time period during which base stations BS_1' to BS_4' are switched

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over, thus shortening instantaneous disconnection of communications.--

Page 9, replace the paragraph, beginning on line 18, bridging pages 9 and 10, with the following amended paragraph:

--Fig. 2 is a block diagram illustrating the configuration of a base station ~~BS_1', BS_2', BS_3', BS_4'~~ in a wireless LAN system of the present embodiment. Referring to Fig. 2, each of the base stations ~~BS_1' to BS_4'~~ includes a wireless transmission/reception circuit 1, a transmission/reception switching circuit 2, an agent advertisement filtering circuit 3, an agent advertisement memory 4, a cable network interface circuit 5, a terminal belonging management circuit 6, and an agent advertisement transmission circuit 7. A bi-directional transmission/reception line, which is used in communications between a mobile terminal and a communication destination, is inserted between the transmission switching circuit 2 and the cable network interface circuit 5.--

Page 10, replace the paragraph, beginning on line 8, with the following amended paragraph:

--The base station ~~BS_1', BS_2', BS_3', BS_4'~~ is linked to a network via the cable network interface circuit 5. The cable network interface circuit 5 monitors an agent advertisement frame periodically sent from an agent and then outputs a received agent advertisement to the agent advertisement memory 4 via the agent advertisement filtering circuit 3. The agent advertisement

filtering circuit 3 filters signals on the network and extracts an agent advertisement frame. The agent advertisement memory 4 stores the agent advertisement extracted by the agent filtering circuit 3.—

Page 12, replace the paragraph, beginning on line 19, bridging pages 12 and 13, with the following amended paragraph:

--The base station decision circuit 13 detects signals (e.g. beacon) periodically transmitted from a base station. If signals are not detected, the base station decision circuit 13 judges that the ~~self station~~ mobile terminal has moved out from the radio cell of the base station. Moreover, when detecting signals periodically transmitted from [[other]] another base station, the base station decision circuit 13 notifies the belonging processing circuit 14 of the detection. When receiving the notice, the belonging processing circuit 14 transmits a belonging request signal to the base station via the wireless transmission/reception circuit 8 and via the transmission/reception switching circuit 9.--